

SUPERIOR  GRAPHITE

SUPER

G



Super G™: Superior Productivity and Cost Effectiveness in a Carbon Additive

Desulco®, formulated by Superior Graphite, is the purest form of carbon additive available on the market. This desulphurized coke was developed for the demanding needs of the ferrous metals industry.

When combined with calcined petroleum pitch coke, the resulting Super G™ offers a carbon additive with a customized higher sulfur content for even greater cost effectiveness. Super G™ has been formulated to match sulfur levels of anthracite blends imported from China, while offering the benefits of Desulco®, including reduced base iron sulfur, reduced slag, faster dissolution, higher carbon recovery and increased productivity.

Why Choose Super G™ Over Anthracite Blends?

Sizing – Typical sizing for anthracite blends are 1/4" x 20 mesh. Some blends containing as much as 7.5% fines less than 80 mesh, which will not go into solution.

Super G™ has a consistent sizing of 3/8" x 65 mesh (212µm).

Blend Components – Can consist of ECA (electrically calcined anthracite), GCA (gas calcined anthracite), crushed synthetic, amorphous carbon, graphitized coke, and hard carbide like pieces. It is not uncommon to find non-carbonaceous material in some blends.

Super G™ contains a minimum of 99.5% Carbon.

Cost Considerations – With the use of low-quality recarburizers, the quantity and quality of higher priced pig iron, Ferro-alloys and post inoculants are typically increased.

Super G™ reduces the need for expensive melt additives.

Carbon Purity – Some anthracite blends are as low as 93.5% C.

Super G™ is +99.5% C.

Ash Content – Anthracite blends can contain up to 6.5% ash.

Super G™ contains less than 0.5% ash.

Dissolution – Anthracite blends can slow carbon dissolution by as much as 22%.

Super G™ provides increased dissolution rates over anthracite blends.

Nucleation – Anthracite does nothing in terms of nucleating the iron.

Super G™ contains microcrystalline graphitic structures that provides for nucleation.

Slag Formation – Anthracite blends have shown an increase in slag from 6 – 30% by weight.

Super G™ reduces slagging time, labor and disposal costs.

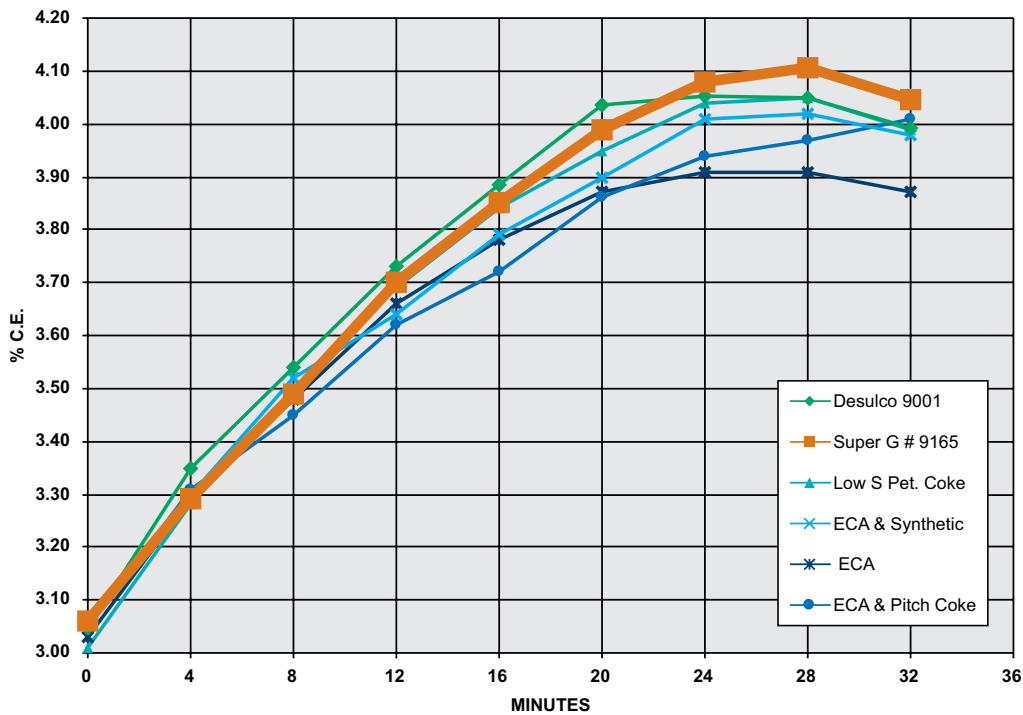
Furnace Lining – Anthracite blends can reduce lining life as much as 25%.

Super G™ extends the life of your furnace lining, reducing maintenance costs and increasing up-time.



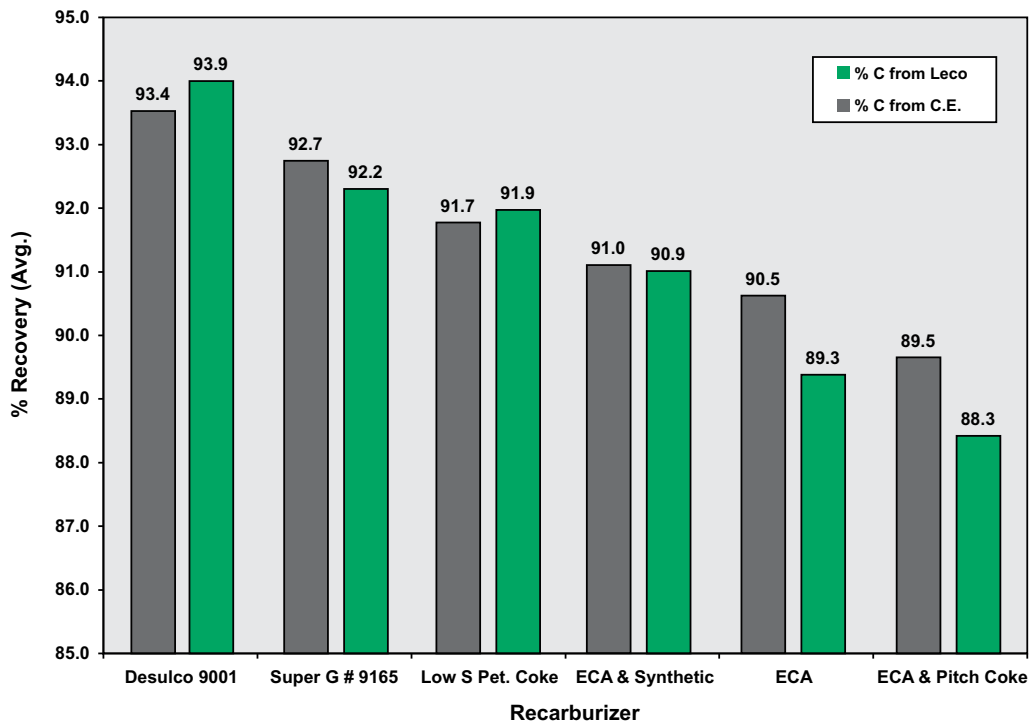
Super G™: When Cost, Quality AND Performance Matter!

Increase in Carbon Equivalent vs. Solution Time for Various Carbon Raisers



Super G™ goes into solution faster, reducing operating costs.

Carbon Recovery at 20 Minutes



Super G™ raises carbon content quickly, increasing your productivity.

Available Super G™ Products

Super G™ 9120	
	Specification
Carbon	99.5% Min
Ash	0.5% Max
Sulfur	0.21% Max
Moisture	0.5% Max
Volatiles	0.25% Max
Particle Size	90% -3/8" and +65 Tyler mesh (9.5mm – 212µm)

Super G™ 9130	
	Specification
Carbon	99.5% Min
Ash	0.5% Max
Sulfur	0.18% Max
Moisture	0.4% Max
Volatiles	0.25% Max
Particle Size	90% -3/8" and +65 Tyler mesh (9.5mm – 212µm)

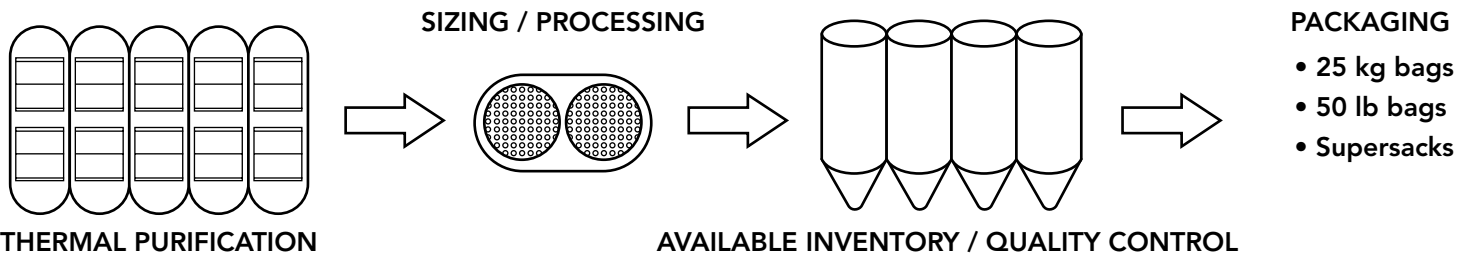
Super G™ 9140	
	Specification
Carbon	99.5% Min
Ash	0.5% Max
Sulfur	0.16% Max
Moisture	0.4% Max
Volatiles	0.25% Max
Particle Size	90% -3/8" and +65 Tyler mesh (9.5mm – 212µm)

Super G™ 9150	
	Specification
Carbon	99.5% Min
Ash	0.5% Max
Sulfur	0.14% Max
Moisture	0.4% Max
Volatiles	0.2% Max
Particle Size	90% -3/8" and +65 Tyler mesh (9.5mm – 212µm)

Super G™ 9185	
	Specification
Carbon	99.5% Min
Ash	0.5% Max
Sulfur	0.07% Max
Moisture	0.25% Max
Volatiles	0.15% Max
Particle Size	90% -3/8" and +65 Tyler mesh (9.5mm – 212µm)

Super G™ 9188	
	Specification
Carbon	99.5% Min
Ash	0.5% Max
Sulfur	0.06% Max
Moisture	0.25% Max
Volatiles	0.15% Max
Particle Size	90% -3/8" and +65 Tyler mesh (9.5mm – 212µm)

Process Flow



Superior Graphite specializes in thermal purification, advanced sizing, blending, and coating technologies, providing value added graphite and carbon-based solutions globally.

Combining 90 years of experience and advanced technologies into every facet of the organization, a wide range of markets are served such as; agriculture, battery/fuel cells, ceramic armor, carbon parts, ferrous/nonferrous metallurgy, friction management, hot metal forming, polymer/composites, powder metals, lubricity, and performance drilling additives.

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